

Occupational and Environmental Health and Safety Education and Research Center
University of Illinois at Chicago
Annual Report: July 1, 2013 – June 30, 2014

The Illinois Occupational and Environmental Health and Safety Education and Research Center (Illinois ERC) is a recognized leader in the national and international movement to promote healthier and safer workplaces and workers. It is the ambition of the Illinois Occupational and Environmental Health and Safety Education and Research Center (Illinois ERC) to improve, promote, and maintain the health of workers and communities. We do this through innovative and interdisciplinary activities that: 1) Educate graduate students to be professionals and researchers in occupational and environmental health and safety; 2) Prepare professionals to be leaders and practitioners in their disciplines through continuing education; 3) Enhance the expertise of employers, worker organizations, and communities through outreach and technical assistance; and 4) Enrich the knowledge base for solving current and future problems. As educators, researchers, and professionals working to promote occupational safety and health, we believe that everyone has the right to healthy work – a job that pays a living wage, a workplace that is safe, an organization that treats them with respect, and access to qualified occupational safety and health professionals; and our public responsibility and charter requires that we give the highest priority to ensuring healthy work for everyone.

The Illinois ERC is comprised of 12 programs: 5 academic programs: Industrial Hygiene (IH), Occupational Medicine (OM), Occupational Safety (OS), Occupational and Environmental Epidemiology (OEE), and Agricultural Safety and Health (ASH-A); Continuing Education in core OSH disciplines (CE) and Agricultural Safety and Health (ASH-CE); an Outreach Program; Center Wide Activities including a Center Administrative Core, Diversity Recruitment, and Interdisciplinary Coordination (CWA); and two research training programs: Pilot Projects Research Training program (PPRT) and Targeted Research Training program (TRT).

1. Strategic Planning and Curricular Changes

Illinois ERC program directors, faculty, students and advisory board engaged in a strategic planning process beginning in 2009 and culminating in 2013 with four strategic goals:

1. Increase quality and quantity of graduate applicants
2. Develop an ongoing assessment plan for each program in the ERC
3. Maintain existing community partnerships
4. Improve visibility of the Illinois ERC in our region and nationally

In the past year, the ERC faculty have reviewed and updated the overall core competencies for trainees in the ERC. The core competencies are shown in Table 1. These competencies were mapped to the learning objectives for the interdisciplinary activities required of all trainees in the ERC (common coursework, weekly interdisciplinary seminar, occupational medicine clinic, process tours and talks, and participation on a TRT team). In some cases, the learning outcomes and activities have been modified in response to this review. The competencies were reviewed and slightly revised by the ERC Advisory Board. The final competencies are shown in Table 1.

Table 1. Overall Competencies for Illinois ERC Trainees

Health Hazards	<ul style="list-style-type: none"> • Anticipate and recognize health hazards in the occupational environment. • Describe the adverse human physiological and toxicological effects of physical, chemical, biological, and ergonomic workplace hazards.
Analytical Methods/ Problem Solving	<ul style="list-style-type: none"> • Develop, implement and evaluate evidence-based interventions • Critically evaluate of current knowledge and develop a research question. • Gain an understanding of research needs and skills. • Critique study designs and evidence.
Policy	<ul style="list-style-type: none"> • Develop and advocate for policy recommendations
Teamwork	<ul style="list-style-type: none"> • Utilize and collaborate with multidisciplinary teams to foster the provision of effective health and safety programs and services. • Appreciate the value of each profession for advocating for improved workplace health and safety
Communication	<ul style="list-style-type: none"> • Communicate effectively with a wide variety of audiences • Develop and deliver training on occupational health and safety issues to a wide range of audiences
Management Practice	<ul style="list-style-type: none"> • Apply a systems-based approach to the development and evaluation of occupational safety and health programs • Demonstrate the value of occupational safety and health programs
Ethics and Professionalism	<ul style="list-style-type: none"> • Practice occupational safety and health to the highest ethical standards • Develop the skills to advocate for and empower workers • Engage in professional development activities that advance the practice of occupational safety and health • Develop skills and desire to engage in on-going continuing education

2. Trainees

In the 2013-2014 academic year, the Illinois ERC had 45 trainees in 5 academic programs (ASH 15 trainees; OEE 6 trainees; IH 12 trainees; OM 5 trainees; OS 7 trainees). There were 9 undergraduate, 12 MS, 12 MPH, and 11 PhD trainees. Twenty-nine percent of trainees were from underrepresented minority groups. Eleven trainees graduated during this period.

In addition to the 6 OM residents supported by the NIOSH funding, the OM program has increased to 8 residents with 2 residents supported by US military funding. New this year has been the implementation of an outcome based competency system also mandated by the accrediting body of the program (ACGME). The clinical practice group at UIC has been able to subsidize resident rotation off campus including rotations at OSHA, John Deere, WHO, and this year we will be sending a resident to NIOSH.

3. Continuing Education and Outreach

The CEO program has planned, implemented and evaluated the following highlighted courses and conferences for a total of 4486 trainees to demonstrate our strategic plans for national visibility, practiced based learning, expanding engagement with employers and program evaluation.

3.1. Professional Development Conferences, Symposia, Meetings

The UIC SPH CE program increased our national and international visibility by hosting EPICOH 2014, (<http://epicoh2014.uic.edu/program.html>), a conference attracting epidemiologists and other occupational health professionals from 44 countries to Chicago from June 23 through 27, 2014. Four

hundred eighteen (418) participants attended, including UIC SPH EOHS faculty and students, who presented on occupational health topics ranging from big data, artisanal mining, home care ergonomics, and community based interventions. Dr. Leslie Stayner, Program Director for the Occupational and Environmental Epidemiology program, chaired the conference, and Ms. Marilyn Bingham, CEO Program Manager steered conference logistics.

In the area of safety we collaborated with Dr. Sheryl Ulin, CE Director for the Michigan ERC, to present the Green Industry Construction Safety Symposium. The event, which drew 35 participants, was held at the annual Chicago Area Construction Safety Council on March 3, 2014. The keynote address was given by Dr. Christine Branche, Director, NIOSH Office of Construction Safety and Health, who provided frameworks for safety through design for the participants.

Mr. Salvatore Cali, CIH, a UIC SPH EOHS faculty member, organized a session for the American Industrial Hygiene Association Chicago Section on November 6, 2013. The session titled “Emerging and Multi-drug Resistant Organism (MDRO) Infectious Diseases: Assessment and Control in Health Care Settings” utilized a practice-informed learning approach, and drew 23 participants. Occupational medicine residents Drs. Sumeet Batra, Andrew Gordon, Sonya Meyers, and Michelle Wueste, provided a medical overview of multi-drug resistant organisms; Dr. Lisa Brosseau, Program Director for Industrial Hygiene and Dr. Rachael Jones, EOHS faculty member, complemented the medical presentations with industrial hygiene content.

Finally, occupational medicine physicians collaborating with local, state and regional employers received CME from our CE program at 9 monthly sessions of the Medical Directors Club that averaged 16 participants per event including topics such as “Marijuana Changing Laws/New Science-A Practical Approach”, influenza vaccines, and asbestos.

Engagement with non-profit employers was expanded through the student projects in *PUBH 370 Using the Public Health Toolbox* course taught by Drs. Sylvia Furner and Joseph Zaroni, Program Director for Continuing Education and Outreach. The 9 course participants worked to understand mental health and occupational health issues of domestic worker participants of Latino Union, the impact of the ACA with participants of the Pilsen Senior Center and Alivio Medical Center, and to investigate the enrollment processes used by six local senior centers impacting GLBT elders.

3.2. Community Outreach and Training

Program evaluation to support culturally relevant occupational health curriculum was part of occupational safety and health training offered to participants of the Chicago Workers Collaborative (CWC), ARISE Chicago and Latino Union of Chicago (LU). CWC identified 9 temporary workers, active in their organization, to receive training as occupational health promoters. These Latino temporary workers work in low wage hazardous jobs in manufacturing in four suburban and exurban areas of Chicago. The trainees participated in five three-hour sessions, beginning a process of utilizing tools to assess hazards and health issues of temporary employment in manufacturing (e.g., food processing, plastics, metal foundries, corrugated boxes). In conjunction with Arise Chicago staff, CEO staff (Ms. Marsha Love, Program Development Manager), co-developed an 8-hour Polish language curriculum on domestic worker health and safety hazards. The curriculum was piloted by Arise Chicago at four training sessions from October 2013 through June 2014 with a total of 62 Polish speaking domestic workers. The curriculum will now be reshaped into a peer train-the-trainer format to expand outreach to this group. LU staff revised a 2012 domestic worker health and safety curriculum (originally developed by an OHIP intern for LU) to reach domestic workers in various communities in Chicago. CEO staff reviewed curriculum drafts and assisted in planning the training sessions. Collaborating with community organizations, LU staff and UIC staff, co-conducted the 2.5 hour curriculum at ENLACE in Little Village for Latinas workers, the Chicago Public Library for Asian/American workers, and Christian Valley Baptist Church in Austin for African/American workers. A total of 84 domestic workers participated.

The Agricultural Safety and Health program continued their activities related to improving grain bin safety. Dr. Aherin and others assisted in the development of a new video on safe grain bin entry procedures, a tool that was recommended as needed by the Grain Handling Safety Coalition that Dr. Aherin helped establish 4 years ago. ASH-CE funds were used to help cover the cost of the services of a professional scriptwriter and raw video footage. Funds from other sources, including a grant from OSHA, are being used to complete the video, which is scheduled to be released by December of this year. The ASH-CE program also assisted with the printing and distribution of 400 grain bin safety labels that were developed by the Grain Handling Safety Coalition. The labels are utilized in grain safety training programs.